



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

EA

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,538	01/31/2001	Ian E. Abrahams	2-591.5	3241
4955	7590	06/27/2005	EXAMINER	
WARE FRESSOLA VAN DER SLUYS & ADOLPHSON, LLP BRADFORD GREEN BUILDING 5 755 MAIN STREET, P O BOX 224 MONROE, CT 06468			GRAYSAY, TAMARA L	
			ART UNIT	PAPER NUMBER
			3623	
DATE MAILED: 06/27/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/774,538	ABRAHAMS ET AL.	
	Examiner	Art Unit	
	Tamara L. Graysay	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 4, 5, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland (article, Risk assessment in construction schedules) in view of White (book, How Computers Work).

Regarding claim 1, Mulholland discloses a system for providing an analysis of use in managing risk, the system comprising: a knowledge base, for maintaining a generic risk record including a plurality of different fields at least some of which have values based on experience gained over time (HyperCard knowledge base in Fig.5; previous project experience in Fig.2; historical data discussed at P.11, C.1, L.5); a data store of profiles, for maintaining a profile risk record associated with a particular profile (a particular construction project type) and including the same plurality of fields as the generic risk record, the profile risk record for use in providing a risk assessment in the associated profile (conceptual project schedule in Fig.2; estimate of project duration at P.11, C.1, L.8-12); a risk processor, for updating the generic risk record based on the profile risk record in the data store of profiles (three recursive steps at P.11, C.1, L.12-17); whereby at least some of the field values of the generic record are refined over time based on values of the corresponding fields of the profile risk record (changes in elements within the knowledge base model discussed at P.12, C.2, last paragraph; transfer project experience and

Art Unit: 3623

institutional knowledge to new projects discussed at P.14, C.2, L.10-13). The Mulholland profile record (previous project experience) is used to update the records within the knowledge base for a particular project that is being analyzed.

Mulholland does not specifically disclose the particular storage arrangement of the HyperCard regarding field values. First, if the values that are contained within the field are being claimed, the values are considered to be nonfunctional descriptive material that is of no import to the scope of the claim insofar as the claim is drawn to a system made up of elements capable of performing the recited functions, and the claimed "field value" broadly includes absence of information in a field. Second, White teaches the use of field values to comprise a stored record (P.79) and records with the same fields constitute a table. If weight is given to the system record structure in that it includes field value, then it would have been obvious to one of ordinary skill in the art to modify Mulholland to include field values corresponding to comparable records, such as taught by White, in order to organize information for more efficient retrieval and storage.

Regarding claim 2, the fields of Mulholland include engineering, procurement, construction, and project management. Mulholland discloses that some of the risk record fields are measuring fields input by the user, and some are calculated fields calculated by the system (the example provided at P.12, C.2, last two lines, the changes in an element [an input risk record field] will not significantly affect the project schedule [a calculated risk record field], for example), and the system allows different modes of analysis in which the fields that are the measuring fields differ (one analysis mode: reexamination of the assumptions and identification

of factors driving the construction schedule, and another analysis mode: recognition of hidden assumptions are discussed P.13, C.2, L.4-9).

Regarding claim 4, the Mulholland system is used in different modes of use (three phases, including engineering design, procurement, and site construction, discussed at P.9, C.1, L.47-49), and further wherein only some fields are required to be used in the risk management analysis, the fields that are required depending on the mode of use (each phase has its own unique set of variables and is differentiated from the other phases by work content discussed at P.9, C.1, L.49-51). The Mulholland system is flexible in that the analysis can be for any combination of the modes (engineering design, procurement, and site construction).

Regarding claim 5, Mulholland discloses both a generic risk record and a profile risk record comprise: a risk component, for indicating a risk, for indicating an inherent risk rating, and also for indicating a residual risk rating (schedule risks discussed at P.11, C.1, L.14 and potential schedule risks at P.11, C.1, L.37-41); a cause component, for indicating cause of the risk (table 3 at P.11 describes some cause components for various risks); a consequence component, for indicating a particular consequence the risk and the inherent and residual of the particular consequence (effects of risks are discussed at P.11, C.1, L.14-15 and modeling of the risks and obtaining the schedule risk profile based on the risks as noted at P.11, C.1, L.16-17); and a control indicating component, for indicating a control, for whether the control is corrective or preventive, and for indicating the effectiveness of the control (the term act or action is used as

a control for managing risk; for example, manager acts quickly and decisively at P.14, C.1, L.4-5 and risk management action at P.14, C.1, L.22-23).

Regarding claim 9, Mulholland further comprising a scripting facility for enabling a user to create a script directing how a risk management process be performed, the script indicating steps that can be used in performing risk analysis in any profile (computers are used for assessment of schedule risks and the navigational links within the system can be defined by the user as discussed at P.12, under the headings Application of Computers and HyperCard Information System for Risk Identification).

Regarding claim 10, Mulholland includes a risk processor that includes values used in determining risk, as depicted in Tables 4 and 5. Note Fig. 2 whereby the conceptual project risk values are based on values from the knowledge base. A knowledge base inherently includes values based on experience gained over time (facts, rules, heuristics, procedures) within its collection, as evidenced by the definition of knowledge base (attached). Moreover, the examiner takes Official notice that it is well known in the art of computer storage and programming to providing initial values, i.e., initialize a record, and that the initial values must be commensurate with the desired result. Therefore, the particular value that is present in the record upon initialization is a determination that is within the level of ordinary skill in the operations research art, in order to be certain that the output of the processor is relevant to the information that the user desires.

2. Claims 3, and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mulholland in view of a prior art admission by applicant(s).

Mulholland discloses choosing a mode of assessment as discussed with respect to claim 2 above; however, Mulholland lacks the particulars of the mode of assessment as recited in claims 3 and 6-8.

Applicant discloses as prior art the use of aggregated calculations in risk assessment (P.24, L.18-19), which are particularly recited in claims 3 and 6-8.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mulholland to include aggregated calculations for risk assessment such as those that were “widely used … and … not unique” at the time of the invention, such as taught by the prior art admission by applicant(s), in order to compute and thus quantify the risk and the consequence associated with the risk.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Initialize (Academic Press Dictionary of Science and Technology) is defined as setting variables to proper values prior to starting a calculation or loop.
- Knowledge base (Academic Press Dictionary of Science and Technology) is defined as the collection of knowledge of an expert system, including facts, rules, heuristics, and procedures.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara L. Graysay whose telephone number is (571) 272-6728. The examiner can normally be reached on Mon - Fri from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tamara L. Graysay
Examiner
Art Unit 3623

20050623